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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,216	09/03/2003	Takanori Masui	116970	2609

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EXAMINER	
GELAGAY, SHEWAYE	

ART UNIT	PAPER NUMBER
2437	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/653,216	MASUI ET AL.	
	Examiner	Art Unit	
	SHEWAYE GELAGAY	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-13,15,16 and 18-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-13, 15-16, 18-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to Pre-Appeal Request filed on July 24, 2008. Claims 2-13, 15-16, 18-28 are pending.

Response to Arguments

2. Applicant's arguments filed 7/24/08 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-13, 15-16, 18-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 19 and 20 recite "the input data," "the inputted data," "the data decrypted by the decryption module" and "the data", it is unclear which data exactly "the data" recited in lines 9, 19 and 21 refers to.

3. Claims 19 and 20 recite, "decides based on a job classification information of the inputted data that the data decrypted by the decryption module is to be printed without the encryption module encrypting the data." The claimed limitation is indefinite because it is unclear what happens if the inputted data is unencrypted data.

4. Claims 19-20 recite "deciding whether the input data is encrypted, whether to store the input data, and whether to encrypt data decrypted by the decryption module"

The claims are indefinite because the limitations do not describe what happens if one of the decision condition is not met. For example, what if the input data is not encrypted? What if the data is not to be stored?

5. Claims 2-13, 15-16, 18-28 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Claims 19-20 recite, "a deciding device, deciding whether the input data is encrypted, whether to store the input data, and whether to encrypt data decrypted by the decryption module" and "an encryption module for encrypting data decrypted by the decryption module using a second encryption key different from the first encryption key" and "a storage device for storing data decided upon for storing by the deciding device" "deciding device, decides based on a job classification information of the inputted data that the data decrypted by the decryption module is to be printed without the encryption module encrypting the data." The omitted steps are: the claim recites, "deciding based on classification information of the inputted data that the data decrypted by the decryption module" however, the claim limitation does not describe how "the data decrypted by the decryption module" is the "inputted data" what will happen to the if the inputted data is unencrypted data.

3. Claims 2-13, 15-16, 18 and 21-28 are also rejected for being dependent on the rejected claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-4, 15-16, 19-20, 24 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295 and in view of Chiarabini et al. (hereinafter Chiarabini) US 2004/0015687.

As per claims 19 and 20:

Russ teaches an information processing device comprising:

a data input interface for inputting data; (figure 6; page 11, paragraphs 104-109)

a decryption module for decrypting encrypted data; (figure 6; page 11, paragraphs 104-109; …the cryptographic device decrypts the service instance using the control word provided by the secure element)

an encryption module for encrypting data; (figure 6; page 11, paragraphs 104-109; … the cryptographic device encrypts the service instance using an encryption scheme that was dynamically negotiated by the DSCT and the client) and

a storage device for storing data; (figure 6; page 9, paragraph 82; page 11, paragraphs 104-109)

a deciding device for deciding whether the input data is encrypted, whether to store the input data and whether to encrypt data decrypted by the decryption module, (figure 6; page 11, paragraphs 104-109; …processor determines an encryption scheme

for the selected service instance. The encryption scheme can be either to encrypt or not encrypt the selected service instance. This determination is made for the decrypted service instance)

wherein the decryption module decrypts encrypted data input by the data input interface using a decryption key forming a pair with a first encryption key used to encrypt the data, (figure 6; page 11, paragraphs 104-109; ...the cryptographic device decrypts the service instance using the control word provided by the secure element)

the encryption module encrypts data decided upon for encryption by the deciding device using a second encryption key different from the first encryption key, (figure 6; page 11, paragraphs 104-109; ... the cryptographic device encrypts the service instance using an encryption scheme that was dynamically negotiated by the DSCT and the client)

the storage device stores data decided upon for storing by the deciding device. (figure 6; page 9, paragraph 82; page 11, paragraphs 104-109)

Russ does not explicitly teach a decryption module decrypts encrypted data encrypted by the encryption module and stored in the storage device using the second encryption key. Saito in analogous art, however, discloses teach a decryption module decrypts encrypted data encrypted by the encryption module and stored in the storage device using the second encryption key. (col. 6, lines 20-44) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ with Saito in order to automatically handle re-encryption and re-decryption of stored data using a key that is stored in the device.

Both references do not explicitly disclose a deciding device (1) decides based on a job classification information of the input data that the data decrypted by the decryption module is to be printed without the encryption module encrypting the data, and (2) instructs to execute a print process associated with the inputted data after deciding that the data decrypted by the decryption module is to be printed without the encryption module encrypting the data. Chiarabini in analogous art, however, teaches a deciding device (1) decides based on a job classification information of the input data that the data decrypted by the decryption module is to be printed without the encryption module encrypting the data, and (2) instructs to execute a print process associated with the inputted data after deciding that the data decrypted by the decryption module is to be printed without the encryption module encrypting the data. (figures 8, 11; page 5, pp. 80; page 7, pp. 89) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Chiarabini in order to avoid exposing valuable document content at the print service provider by transmitting and storing data in encrypted format, thereby ensuring security of content data from portal to printer device. (Abstract; Chiarabini)

As per claim 2:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. In addition, Saito further discloses wherein the key generator generates the second encryption key when power to the device is turned on. (col. 5, lines 65-67)

As per claim 3:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. In addition, Russ further discloses wherein the data input interface also inputs unencrypted data, and the encryption module also encrypts unencrypted data input by the data input interface. (figure 6; page 11, paragraphs 104-109; ...the determination is made for the decrypted service instance and for unencrypted service instances)

As per claim 4:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. In addition, Saito further discloses a key generator for generating the second encryption key. (col. 7, lines 49-57)

As per claims 15:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. In addition, Russ further discloses deciding means for deciding whether or not to encrypt data inputted by the data input interface, wherein the encryption module encrypts data decided upon for encryption by the deciding means. (figure 6; page 11, paragraphs 104-109)

As per claim 16:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. In addition, Russ further discloses a printer for decrypting and printing data stored in the storage device. (figures 8, 11; page 5, pp. 80; page 7, pp. 89)

As per claims 24 and 26-27:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. In addition, Saito further discloses wherein deciding means whether to encrypt data decrypted by the decryption module is based on confidentiality information of the input data. (col. 6, lines 20-44)

3. Claims 5-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295 and in view of Chiarabini et al. (hereinafter Chiarabini) US 2004/0015687 and further in view of Blakley III, (hereinafter Blakley) U.S. Patent 5,677,952.

As per claim 5:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose a memory controller for storing the second encryption key in the volatile memory. Blakley in analogous art, however, discloses a memory controller for storing the second encryption key in the volatile memory. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito, Chiarabini with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

As per claim 6

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose wherein the key

generator generates the second encryption key using information characteristic to the device itself. Blakley in analogous art, however, discloses wherein the key generator generates the second encryption key using information characteristic to the device itself. (col. 5, lines 41-60) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito, Chiarabini with Blakley in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claim 7:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose wherein the key generator generates the second encryption key when power to the device is turned on. Blakley in analogous art, however, discloses wherein the key generator generates the second encryption key when power to the device is turned on. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito, Chiarabini with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

As per claims 8-10:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose a media reader capable of being installed with a removable portable storage media storing key generation parameters for reading a key generation parameter stored on the installed portable

storage media, wherein the key generator generates the second encryption key using the key generation parameter. Blakley in analogous art, however, discloses a media reader capable of being installed with a removable portable storage media storing key generation parameters for reading a key generation parameter stored on the installed portable storage media, wherein the key generator generates the second encryption key using the key generation parameter. (col. 5, lines 41-60) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito, Chiarabini with in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claims 11 and 12:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose a media reader capable of being installed with a removable portable storage media storing the encryption key, wherein the encryption module reads the second encryption key from the portable storage media installed in the media reader and performs encryption. Blakley in analogous art, however, discloses a media reader capable of being installed with a removable portable storage media storing the encryption key, wherein the encryption module reads the second encryption key from the portable storage media installed in the media reader and performs encryption. (col. 4, lines 40-65) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ, Saito and Chiarabini with Blakley in order to

enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claim 13:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose having encryption keys corresponding to each user using the device, wherein the encryption module performs encryption using an encryption key for the user corresponding to the data. Blakley in analogous art, however, discloses having encryption keys corresponding to each user using the device, wherein the encryption module performs encryption using an encryption key for the user corresponding to the data. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ, Saito and Chiarabini with Blakley in order to erase secret keys when the authorized user logs off. (col. 6, lines 48-57; Blakley)

As per claim 18:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose a memory controller for storing the second encryption key in the volatile memory. Blakley in analogous art, however, discloses a memory controller for storing the second encryption key in the volatile memory. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ, Saito and Chiarabini with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

4. Claims 21-23, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295 in view of Chiarabini et al. (hereinafter Chiarabini) US 2004/0015687 and further in view of Foster et al. (hereinafter Foster) U.S. 2002/0184518.

As per claims 21 and 28:

The combination of Russ, Saito and Chiarabini teaches all the subject matter as discussed above. None of the references do explicitly disclose wherein deciding based on a job classification information of the input data. Foster in analogous art, however teaches wherein deciding based on a job classification information of the input data. (page 9, pp. 96-99) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Foster in order to allow users to generate specific tasks and to control the requested task accordingly. (page 1, pp. 2; Foster)

As per claims 22-23 and 25:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose deciding whether to store the input data is based on attribute information of the input data. Foster in analogous art, however teaches deciding whether to store the input data is based on attribute information of the input data. (page 5, pp.61; page 9, pp. 96-99) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Foster in order to allow users to

generate specific tasks and to control the requested task accordingly. (page 1, pp. 2; Foster)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437